

**United States Department of Health & Human Services**  
 Office of the Assistant Secretary for Preparedness and Response


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 ASSISTANT SECRETARY FOR PREPAREDNESS AND RESPONSE

## Innovations and Best Practices for Public Health & Medical Preparedness and Response

**Michigan EMS Medical Control Seminar**  
 Bellaire, MI  
 September 29, 2014

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 Principal Deputy Assistant Secretary  
 Office of the Assistant Secretary for Preparedness and Response (ASPR)  
 US Department of Health and Human Services


**ASPR leads the nation in preparing for public health and medical emergencies**



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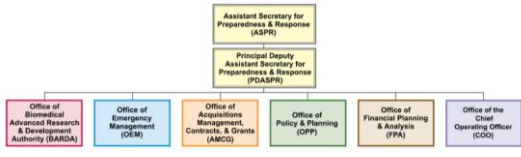
### Our Mission:

Lead the country in preparing for, responding to, and recovering from the adverse health effects of emergencies and disasters by supporting our communities' ability to withstand adversity, strengthening our health and response systems, and enhancing national health security



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**ASPR Organization**

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**ASPR: Where Policy, Science and Response Come Together**



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**ASPR Works With Partners from Local Communities to Global Institutions**

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## Office of Emergency Management (OEM)

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**HHS coordinates federal Public Health and Medical response**

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- Emergency Support Function (ESF)-8 is the mechanism for Federal assistance to supplement State, tribal, and local resources in response to a public health and medical disaster, potential or actual
  - Public health and medical care needs
  - Behavior health needs
  - Veterinary and/or animal health issues
- HHS leads ESF-8 along with 15 supporting Agencies
- ASPR is the coordinator on behalf of HHS Secretary
  - Every Division within HHS has an emergency coordinator that is represented during an event
- HHS supports other Agencies' Emergency Support Functions, as assigned



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## HHS response assets support local/state needs



- National Disaster Medical System
  - 1) Disaster Medical Assistance Teams (DMAT)
    - Provides a temporary medical surge capacity that supplements State and Local capabilities using doctors, nurses, and EMTs
  - 2) Disaster Mortuary Assistance Teams (DMORT)
    - Works with local Chief Medical Examiner in mass casualty event
  - 3) National Veterinary Response Teams (NVRT)
    - Supports both animals in shelters and response animals
- Regional Emergency Coordinators
  - Work with States and communities to develop plans
  - Serve as HHS's liaison to FEMA and state public health
- Recovery assistance and coordination of health and social services

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## NDMS responds to Hurricane Sandy







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## Office of Policy and Planning (OPP)



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## FICEMS Update




- Facilitating transition of military veterans to civilian EMS
- Implementation of Model Uniform Core Criteria (MUCC)
- HHS analysis of the state legal and regulatory barriers to expanding the use of EMS providers for innovative activities such as mobile integrated healthcare or community paramedicine

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## HHS EMS Activities




- Establishment of NIH Office of Emergency Care Research
- Engagement with stakeholders and health care coalitions through the Emergency Care Coordination Center (ECCC) and Division of Health Systems and Health Care Policy (DHSHP)
- CMS Center for Medicare and Medicaid Innovation (CMMI) Health Care Innovation Awards totaling nearly \$30 million dollars
  - Icahn Mt. Sinai School of Medicine - \$9.6 million;
  - Yale - \$7.2 million;
  - City of Mesa - \$12.5 million
- Interim Ebola Guidance for EMS Systems and 9-1-1 PSAPs and a Detailed EMS Checklist for Ebola Preparedness

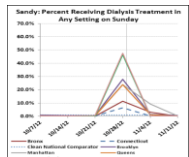
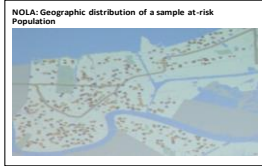
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## Planning for Vulnerable Populations



- Using analysis of existing Medicare data to assess the performance of health system during weather events
  - Encourage best practices (e.g. early pre-event dialysis)
- Primary care needs and pharmaceutical needs
- Develop a protocol for identifying electrically dependent patients in communities for planning and response

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## Using Big Data to Improve At-Risk Resiliency **ASPR**

### Pilot Exercises Results


- Individuals identified as having an oxygen concentrator and/or ventilator
- Homes were visited during the exercise by fire, EMS, and volunteers
- Response at the homes:
  - 89% of individuals matched our records
  - 93% of DME matched our records
- Less than 5% had enrolled in city's Special Needs Registry



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## ASPR MedMap At-Risk Resiliency Data Layers **ASPR**

### At-Risk Resiliency Interactive Map



- Provide de-identified aggregate at-risk CMS data by state, county, and zip code layered over power outage and NOAA weather
- Inform decision making by emergency management, public health, aging services, non-profits, and other partners
- Prioritization of power restoration with electric companies
- Allocation of limited support services (shelters, generators, back up batteries)
- Help hospitals, EMS, and coalitions anticipate and emergency plan for surge
- Anticipate potential need for EMAC requests

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## Community Resilience Tools **ASPR**



- Leverage open source Twitter data to find illnesses being discussed
- Select a geographic area of interest
- Generate a daily list of top 5 trending illnesses for state and local health departments



Be Informed. Be Prepared. **bReddi**

Get your Lifelines. Know your Threat Level. Make a Plan. **ASPR**

Share this Widget

Facebook app that helps you manage your preparedness needs



Facebook app helps you communicate with your existing social networks during a disaster

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## Why the Private Sector Should Be Part of The TEAM? **ASPR**

- The private sector employs 80% of the population
- They have strong infrastructure
- The private sector has specialized skills and assets
- They have systems and process that can help in programmatic development
- Most importantly, they are apart of the community




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## How To Engage Private Sector Partners **ASPR**

- Think about what they can bring to the table
- Start at the local level
- Start your conversations early
- Understand their business terminology
- Think outside the Public Sector Box
- Make them understand what you can offer them to participate






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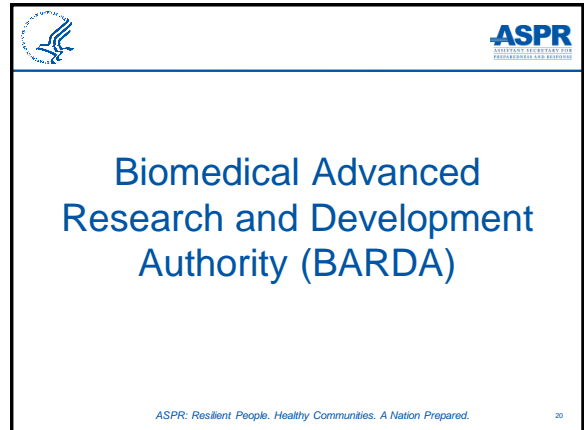
## BRAND Public vs Private **ASPR**

### Public Support/Public Image





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**Ebola**

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**Areas at risk for Ebola emergence**

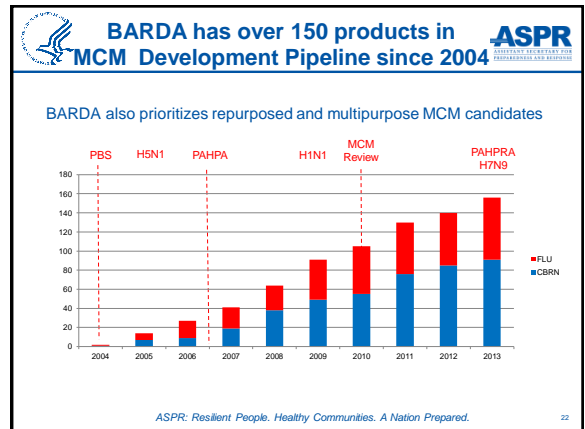
A new model created at Oxford University shows areas where the Ebola virus is most likely present in animal populations. These areas may be at risk for outbreaks of Ebola because of zoonotic transmission.

- Disease Transmission
- International Response
- Domestic Issues
- Symptoms
- Worried Well
- Public Health Preparedness
- Other Issues

Legend: Likelihood that animals are infected with Ebola (Least Likely, Most Likely); Countries containing areas likely to contain animals infected with the Ebola virus.

Source: Oxford University; Reuters/Corbis; The Washington Post

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**BARDA brought 11 MCMs to licensure under Project BioShield**

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Smallpox

Anthrax

Botulinum

Radiation

Leukine

Chemical

An additional 12 more products expected to be licensed by the FDA over the next 5 years

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**Public Private Partnership Changed U.S. Vaccine Industry**

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GlaxoSmithKline Q-Pan H5N1 adjuvanted vaccine

Using adjuvant to produce greater number of doses

Cell-based influenza vaccine

- Derived from cell cultures
- Alternative to egg-based production

Recombinant-based vaccine

- Using an insect virus (baculovirus) and recombinant DNA technology

Working towards a universal flu vaccine

First cell-based influenza vaccine manufacture facility in U.S. (Novartis): Dedicated Dec. 2011

Protein Sciences fluBLOK recombinant flu vaccine

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**Advanced Contracting and core services**  
**promote promising technologies worldwide** **ASPR**  
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Network of Fill-Finish Manufacturers (5 sites)  
(J34490)

Relationship supports Portfolio of Candidates (GSK)

small-business set-asides

ASPR Business Tool Kit

Broad Agency Announcements

Centers for Innovation in Advanced Development and Manufacturing (3 partners)

International Flu Capacity Building Program

Clinical Studies Network (4 partners)

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# Questions?

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